FIG. 1

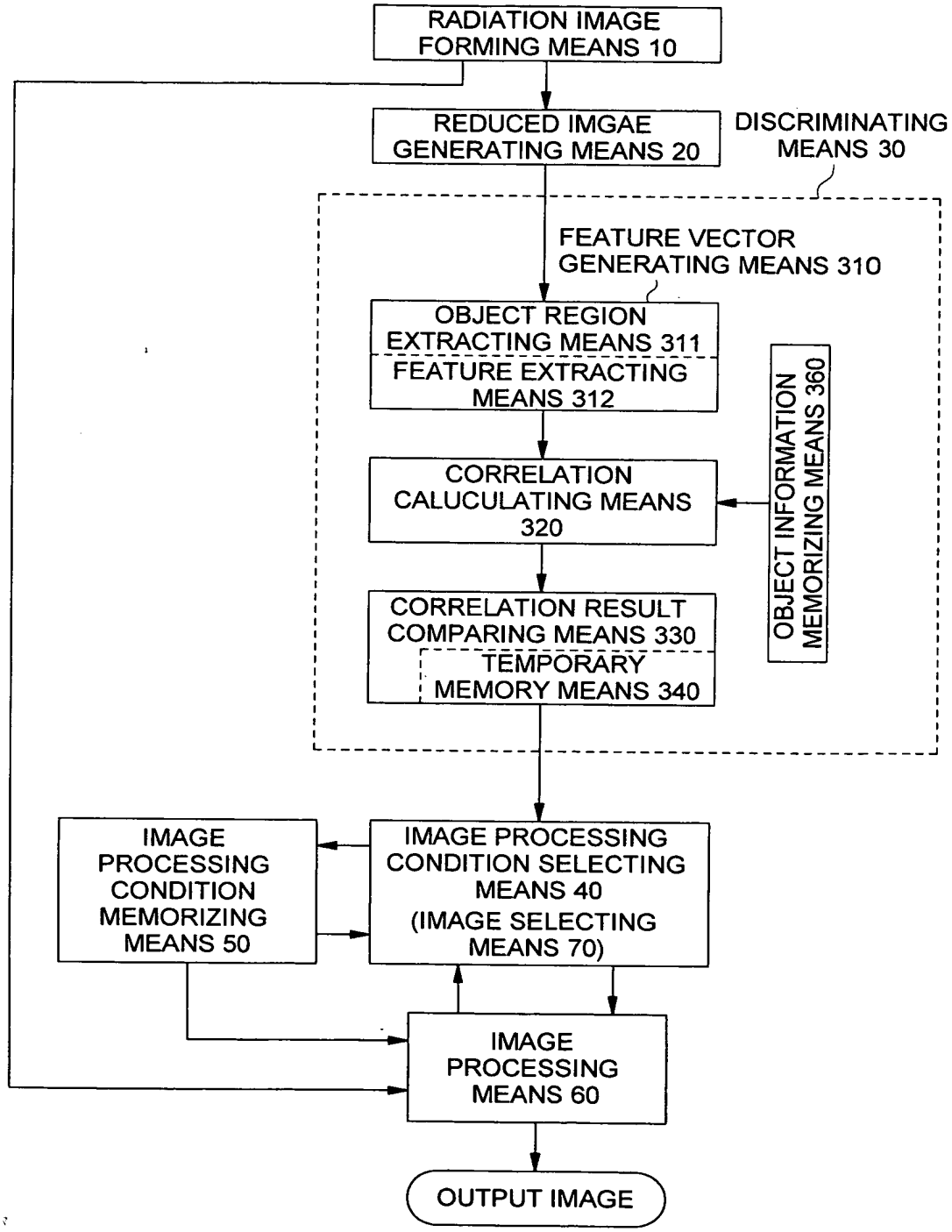
RADIATION IMAGE FORMING MEANS 10
REDUCED IMGAE GENERATING MEANS 20
DISCRIMINATING MEANS 30
FEATURE VECTOR GENERATING MEANS 310
OBJECT REGION EXTRACTING MEANS 311
FEATURE EXTRACTING MEANS 312
CORRELATION CALUCULATING MEANS 320
OBJECT INFORMATION MEMORIZING MEANS 360
CORRELATION RESULT COMPARING MEANS 330
TEMPORARY MEMORY MEANS 340
IMAGE PROCESSING CONDITION MEMORIZING MEANS 50
IMAGE PROCESSING CONDITION SELECTING MEANS 40
(IMAGE SELECTING MEANS 70)
IMAGE PROCESSING MEANS 60
OUTPUT IMAGE

FIG. 2 (a)

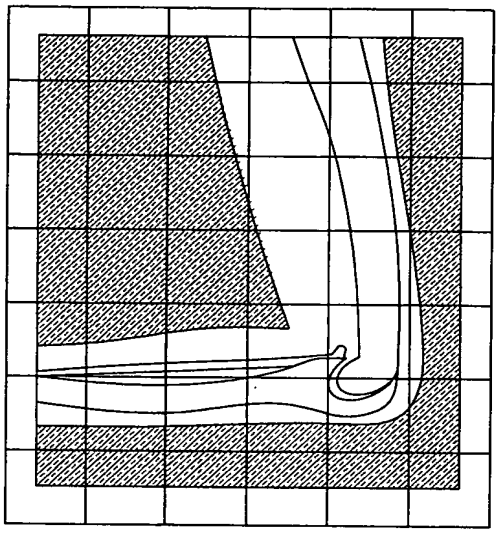

FIG. 2 (b)

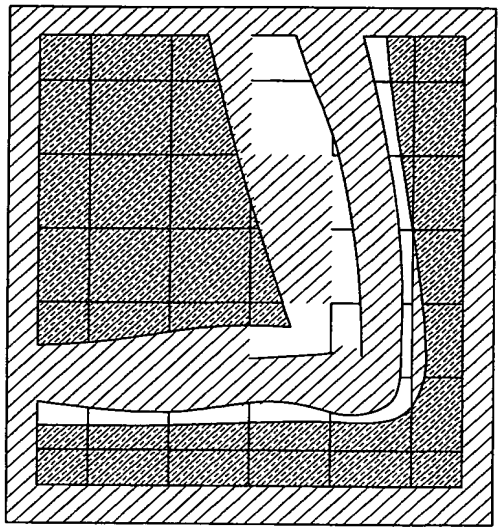

FIG. 2 (c)

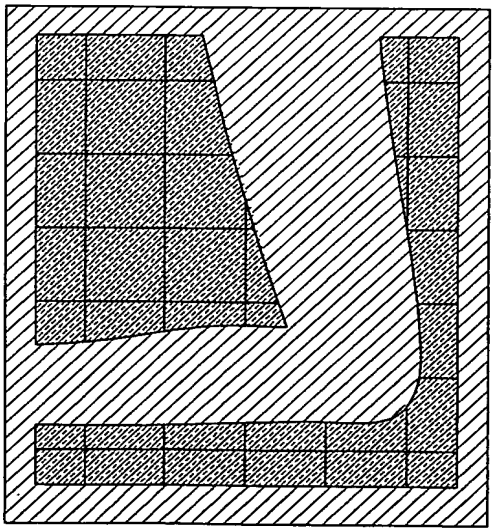

FIG. 2 (d)

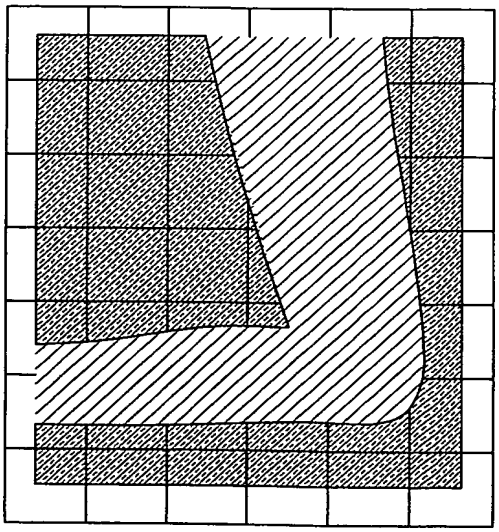

FIG. 3

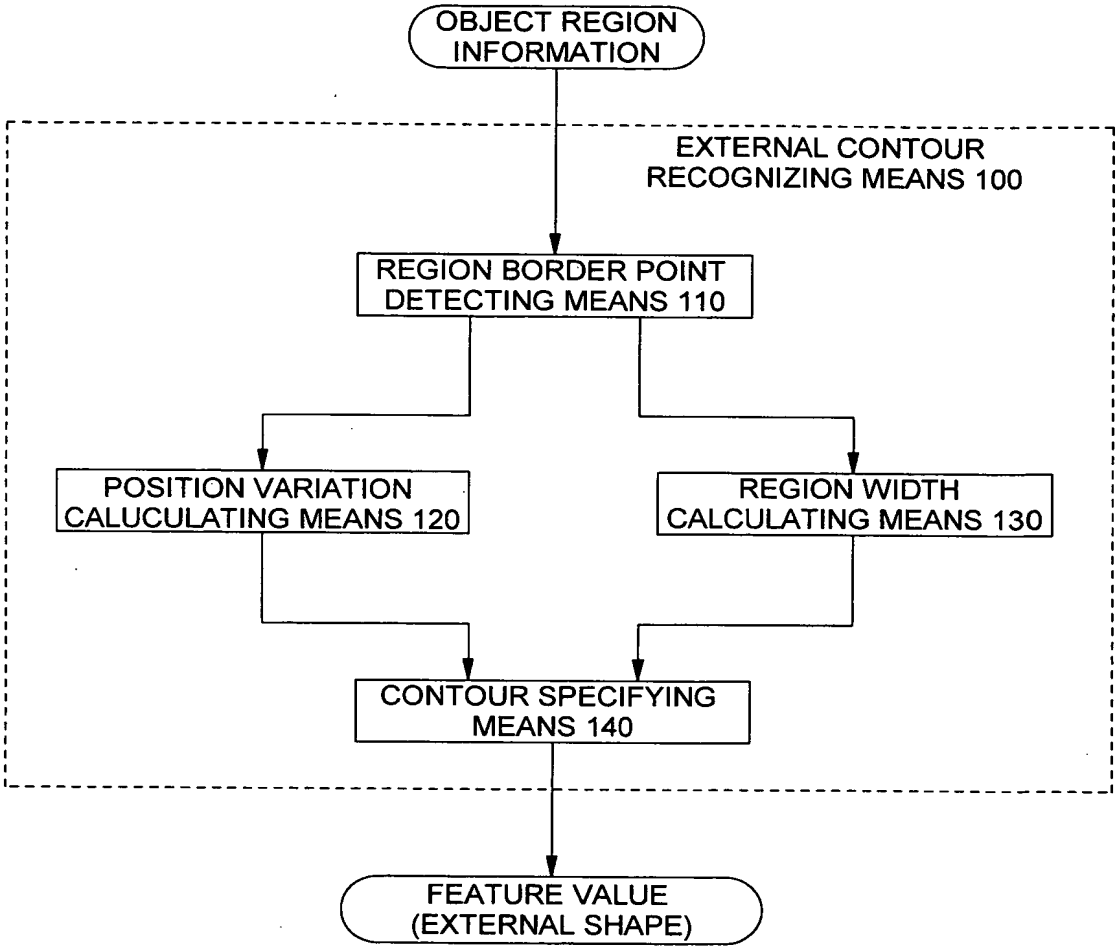
OBJECT REGION INFORMATION
EXTERNAL CONTOUR RECOGNIZING MEANS 100
REGION BORDER POINT DETECTING MEANS 110
POSITION VARIATION CALUCULATING MEANS 120
REGION WIDTH CALCULATING MEANS 130
CONTOUR SPECIFYING MEANS 140
FEATURE VALUE (EXTERNAL SHAPE)

FIG. 4

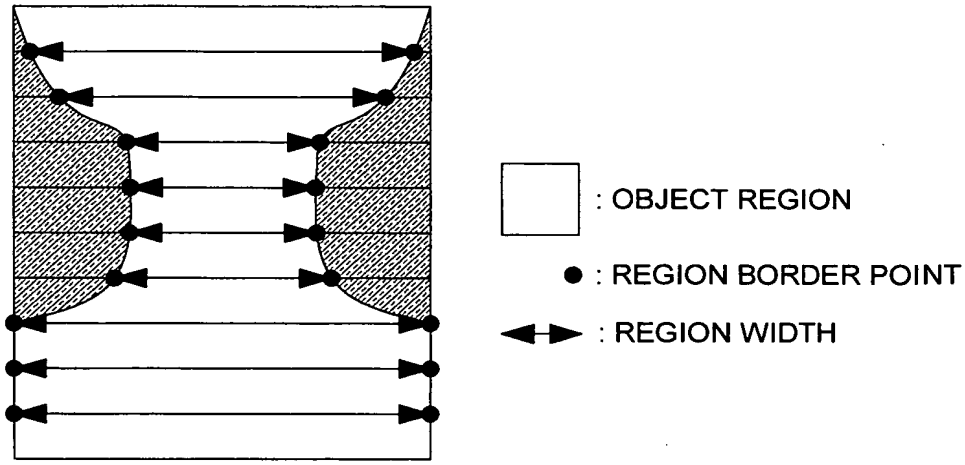

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FIG. 5

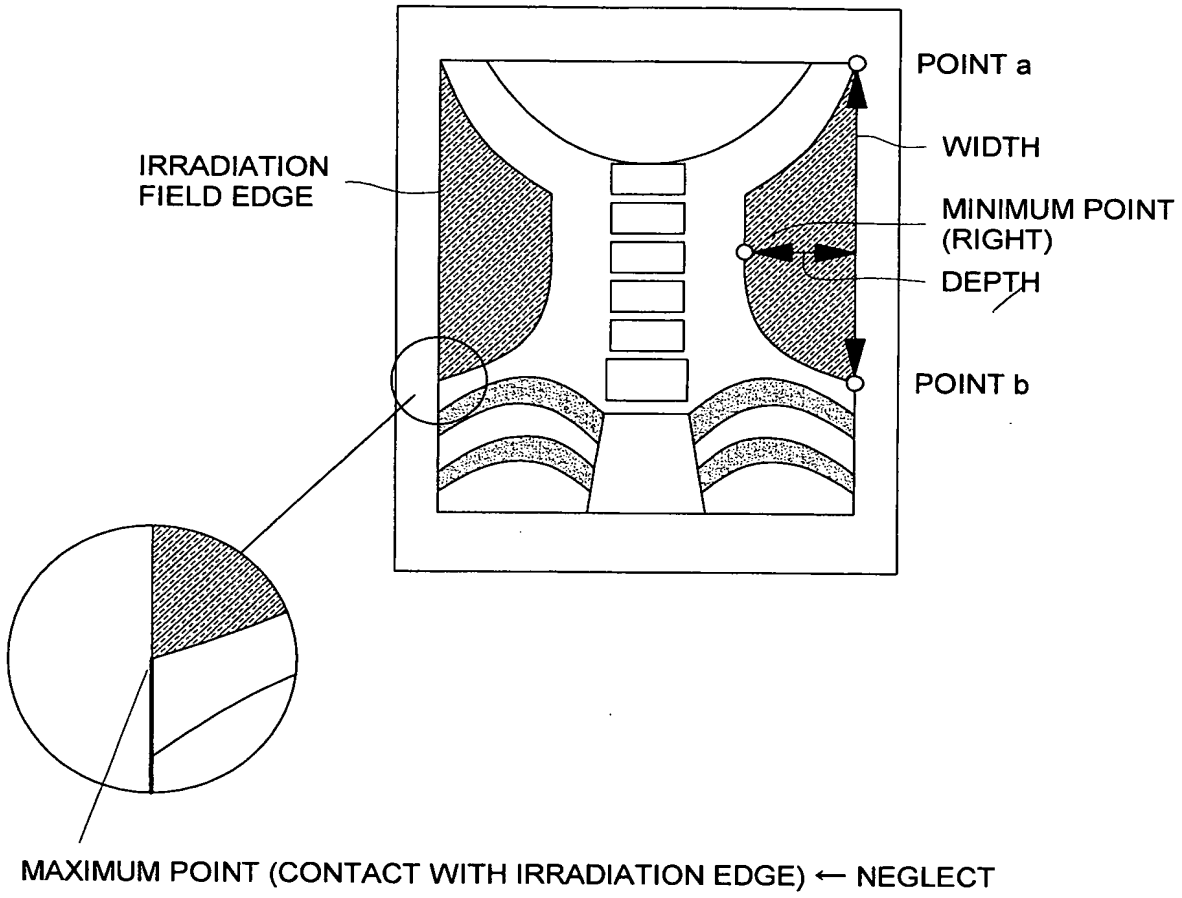

POINT a
WIDTH
IRRADIATION FIELD EDGE
MINIMUM POINT (RIGHT)
DEPTH
POINT b
MAXIMUM POINT (CONTACT WITH IRRADIATION EDGE) ← NEGLECT

FIG. 6 (a)

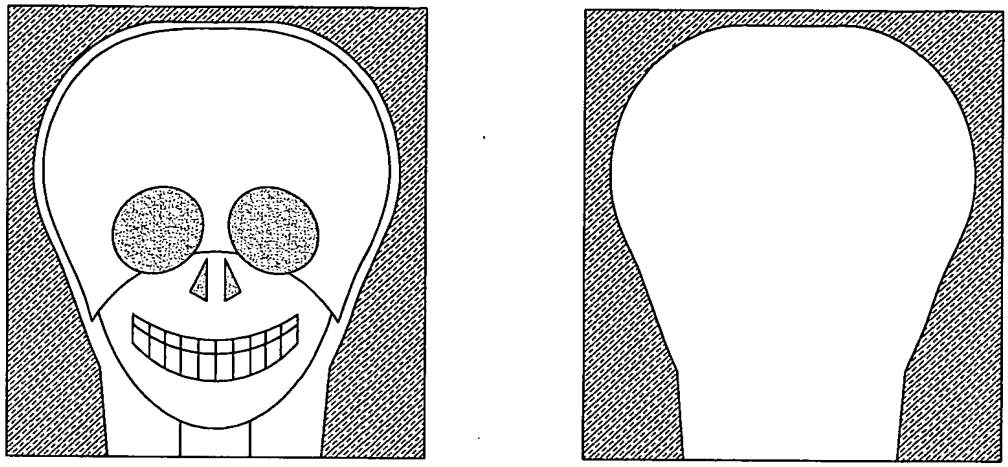


FIG. 6 (b)

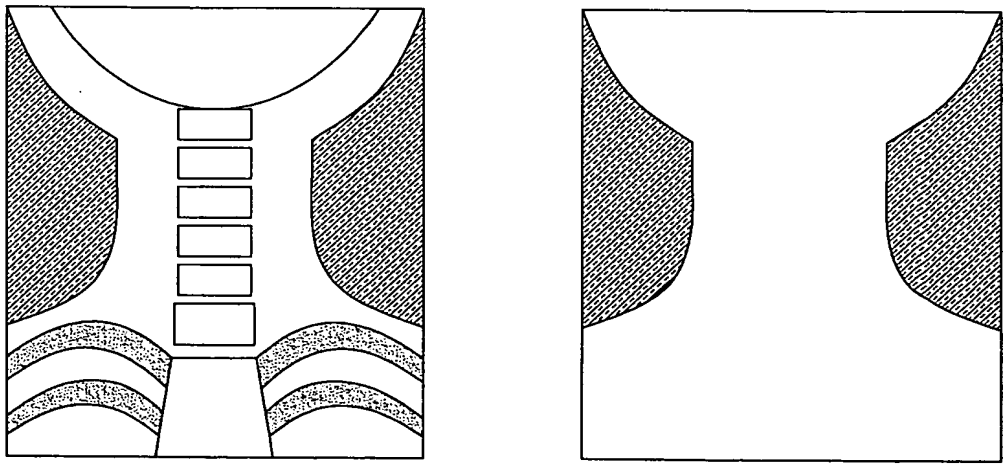


FIG. 7 (a)

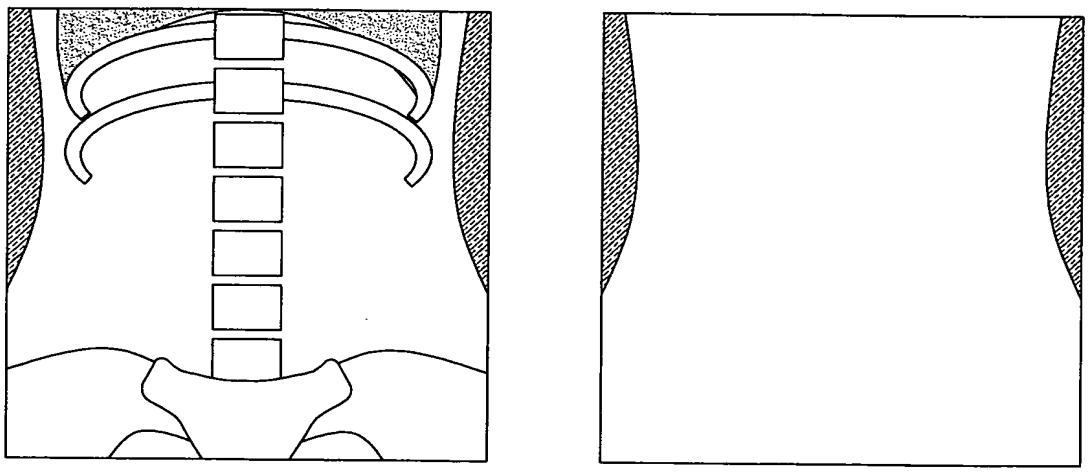


FIG. 7 (b)

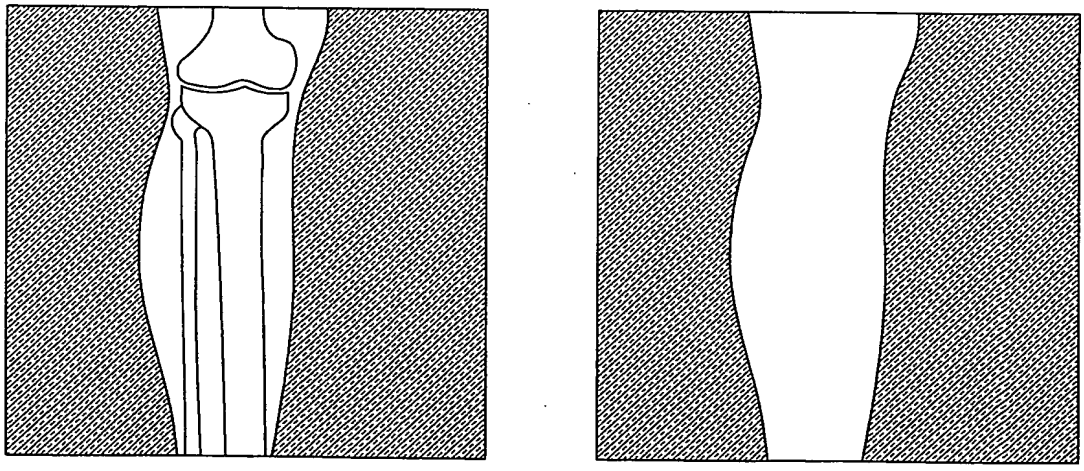


FIG. 8 (a)

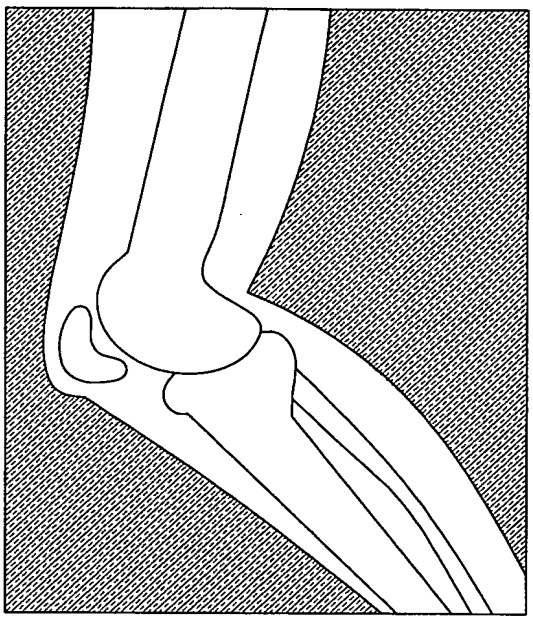


FIG. 8 (b)

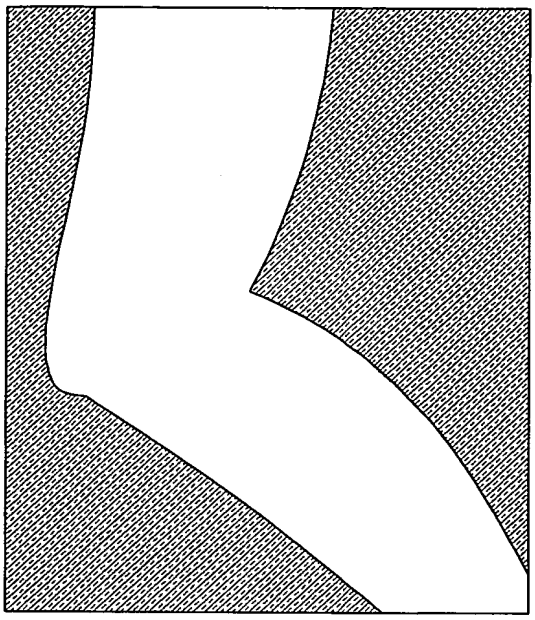


FIG. 9

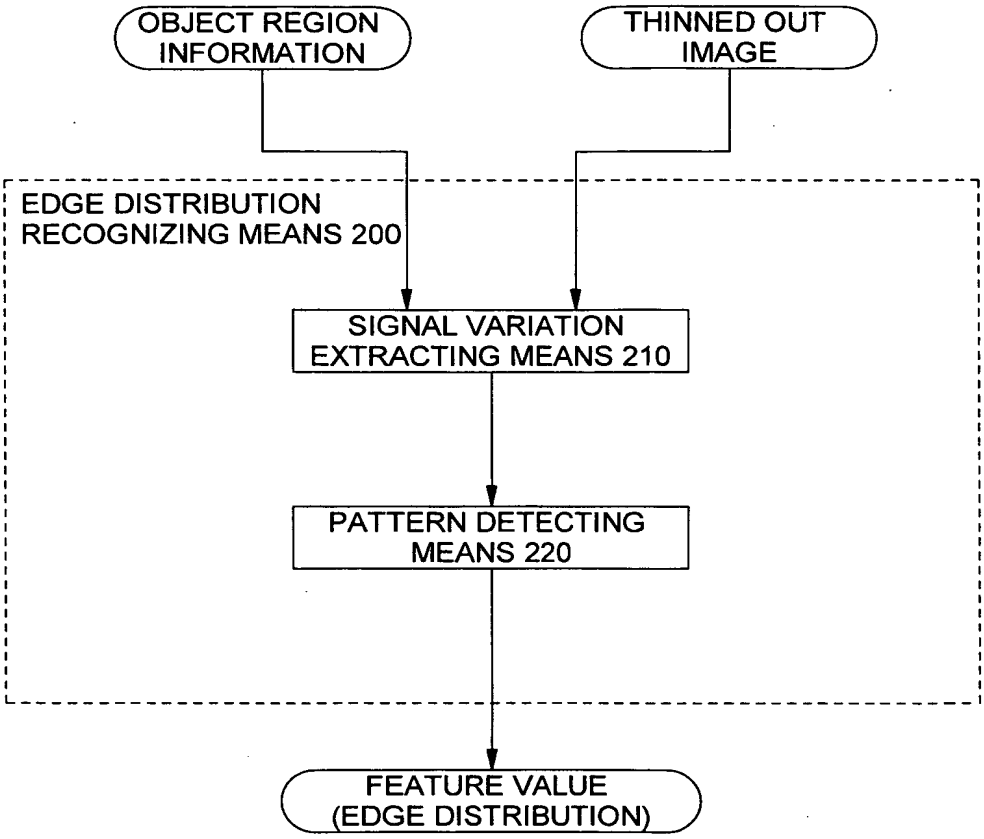
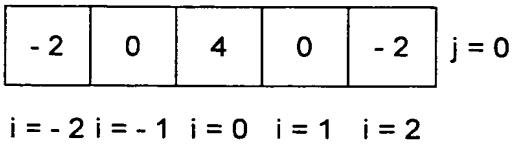
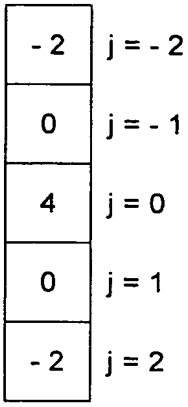

OBJECT REGION INFORMATION
THINNED OUT IMAGE
EDGE DISTRIBUTION RECOGNIZING MEANS 200
SIGNAL VARIATION EXTRACTING MEANS 210
PATTERN DETECTING MEANS 220
FEATURE VALUE (EDGE DISTRIBUTION)

FIG. 10 (a)



n = 1

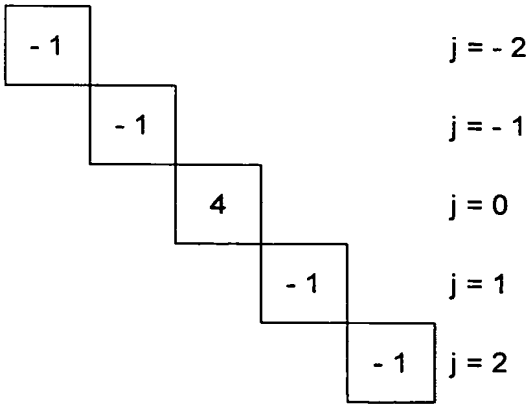
FIG. 10 (b)



i = 0

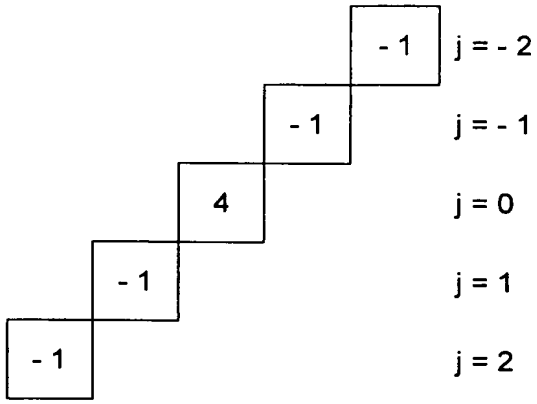
n = 2

FIG. 10 (c)



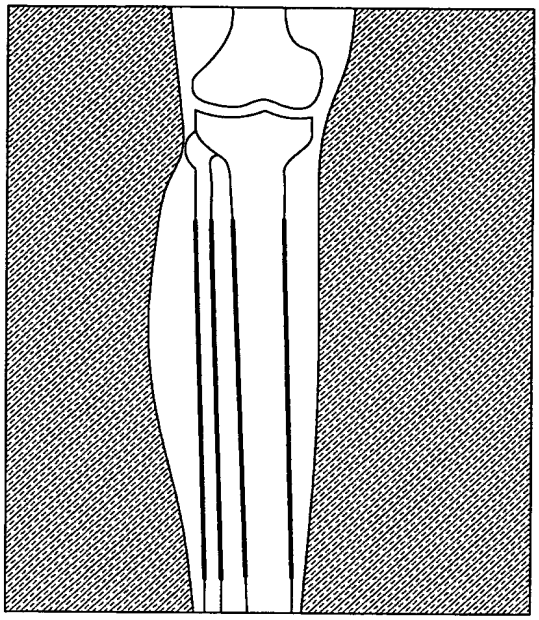
n = 3

FIG. 10 (d)



n = 4

FIG. 11 (a)



——— : CONTINUOUS EDGE

FIG. 11 (b)

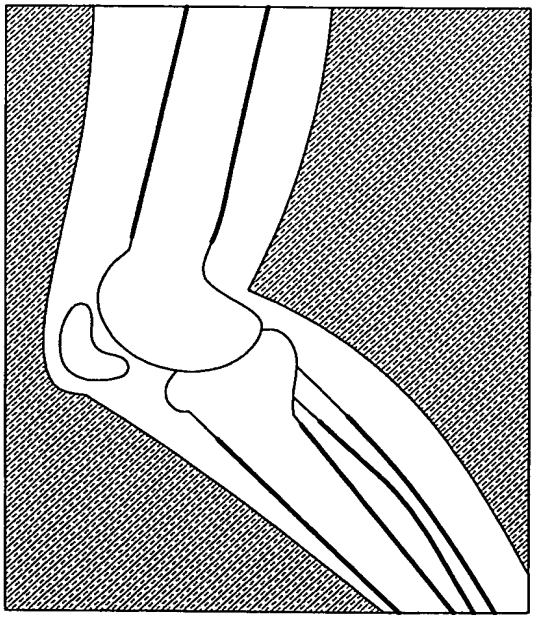


FIG. 12 (a)

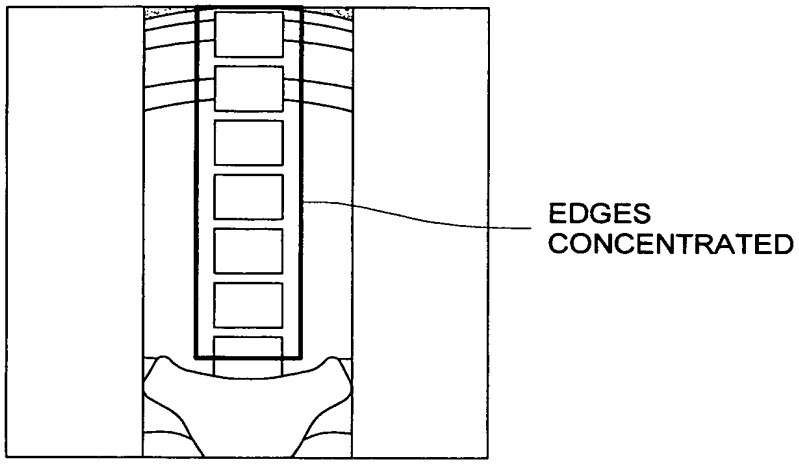


FIG. 12 (b)

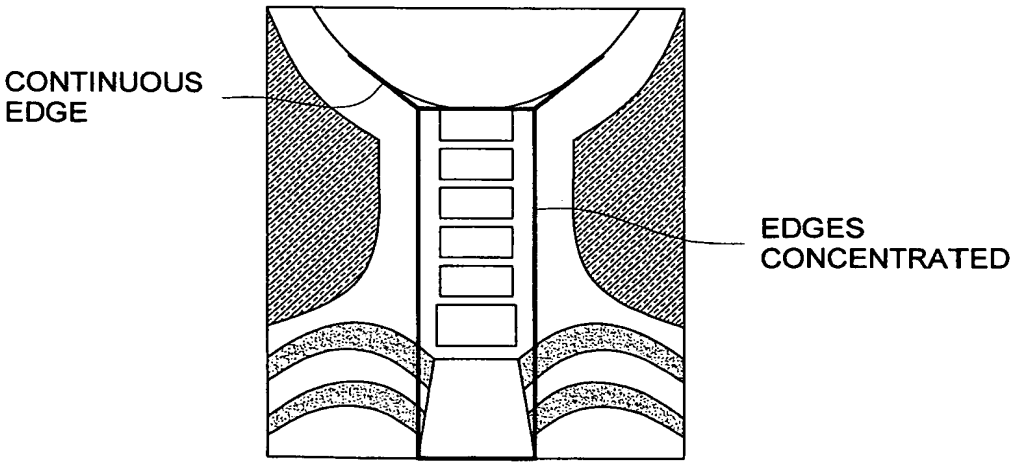


FIG. 13

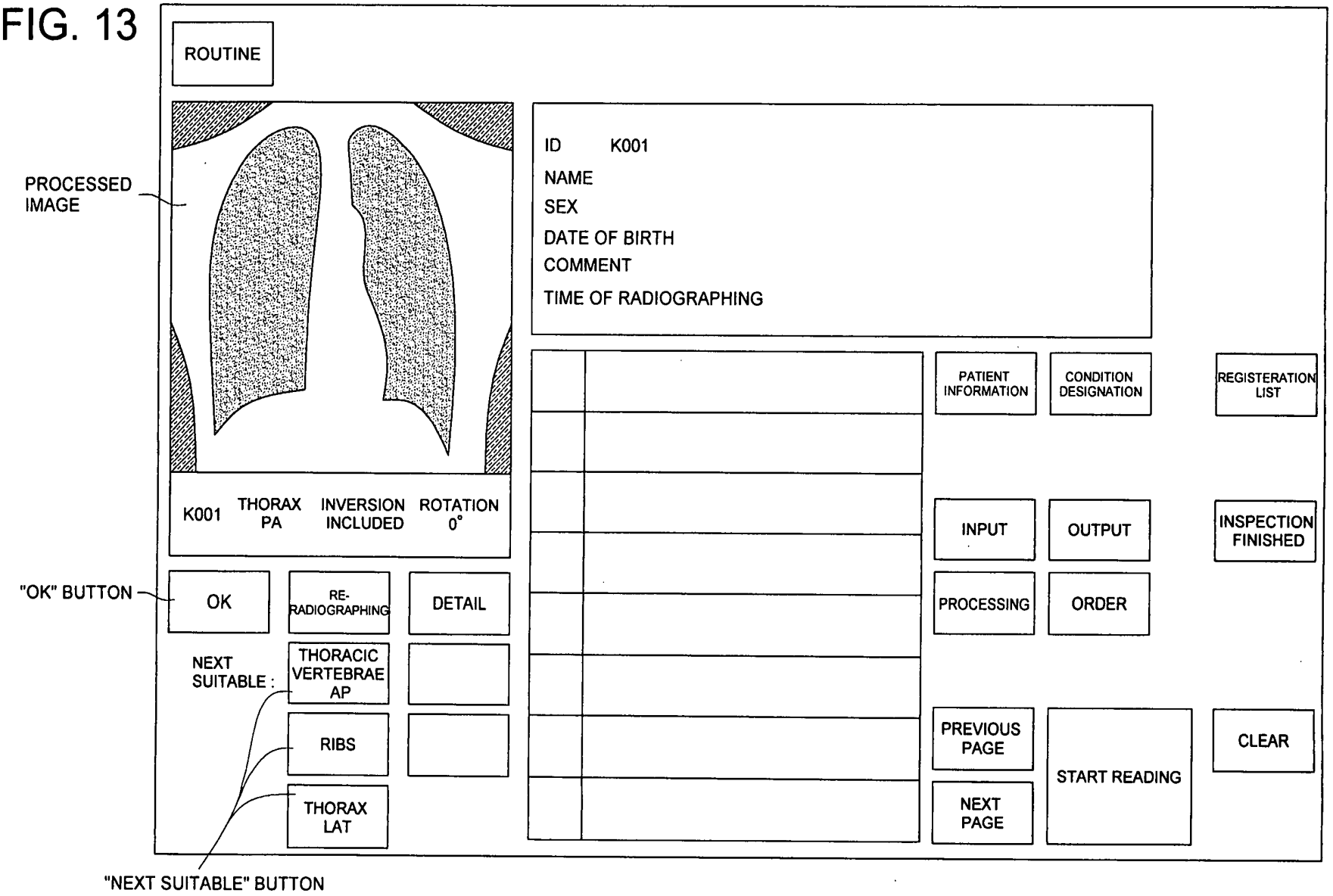

ROUTINE
PROCESSED IMAGE
ID K001
NAME
SEX
DATE OF BIRTH
COMMENT
TIME OF RADIOGRAPHING
PATIENT INFORMATION
CONDITION DESIGNATION
REGISTERATION LIST
K001 THORAX PA INVERSION INCLUDED ROTATION 0°
INPUT
OUTPUT
INSPECTION FINISHED
"OK" BUTTON
OK
RE-RADIOGRAPHING
DETAIL
PROCESSING
ORDER
NEXT SUITABLE :
THORACIC VERTEBRAE AP
RIBS
THORAX LAT
PREVIOUS PAGE
NEXT PAGE
START READING
CLEAR
"NEXT SUITABLE" BUTTON

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FIG. 14

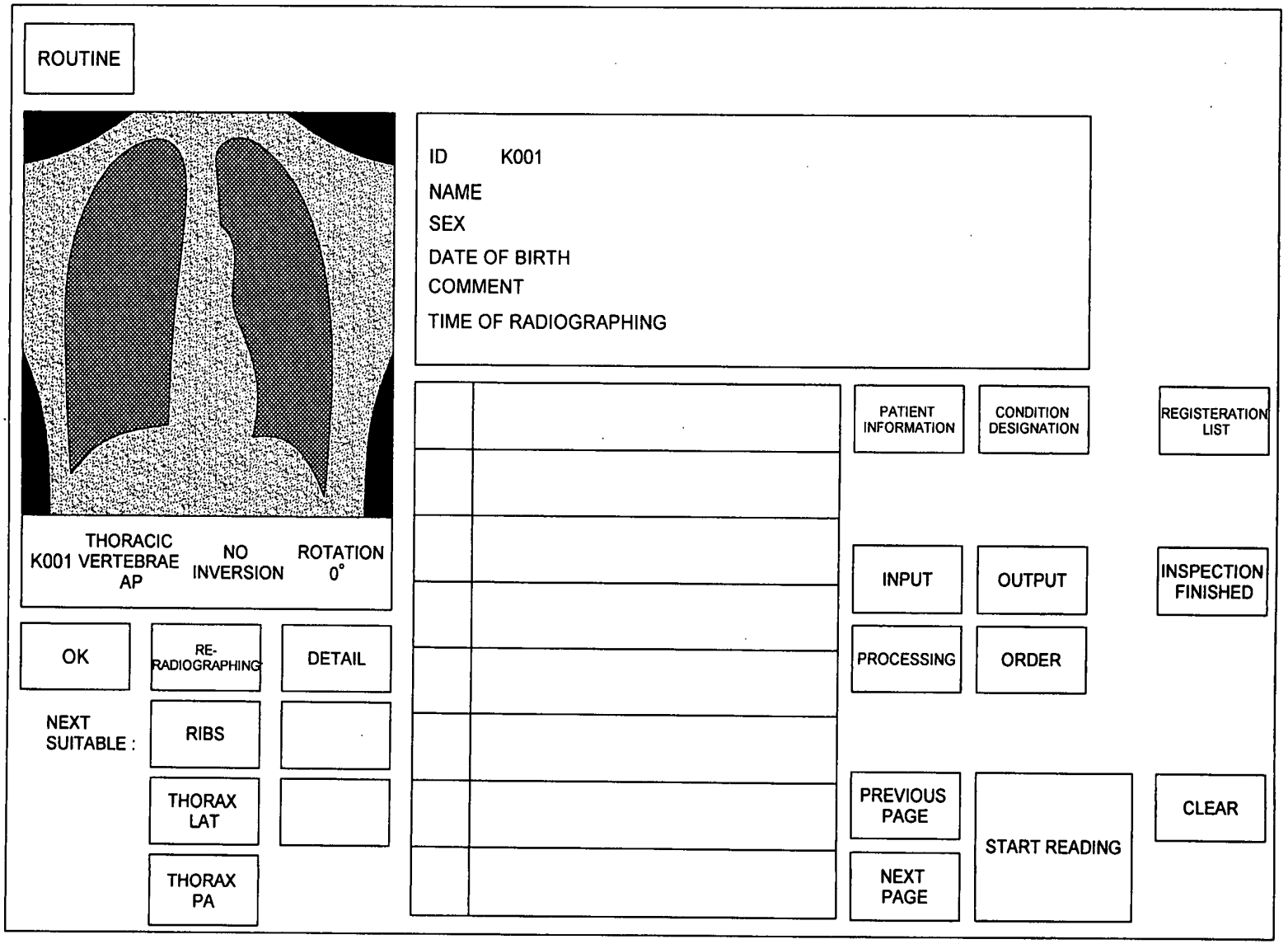
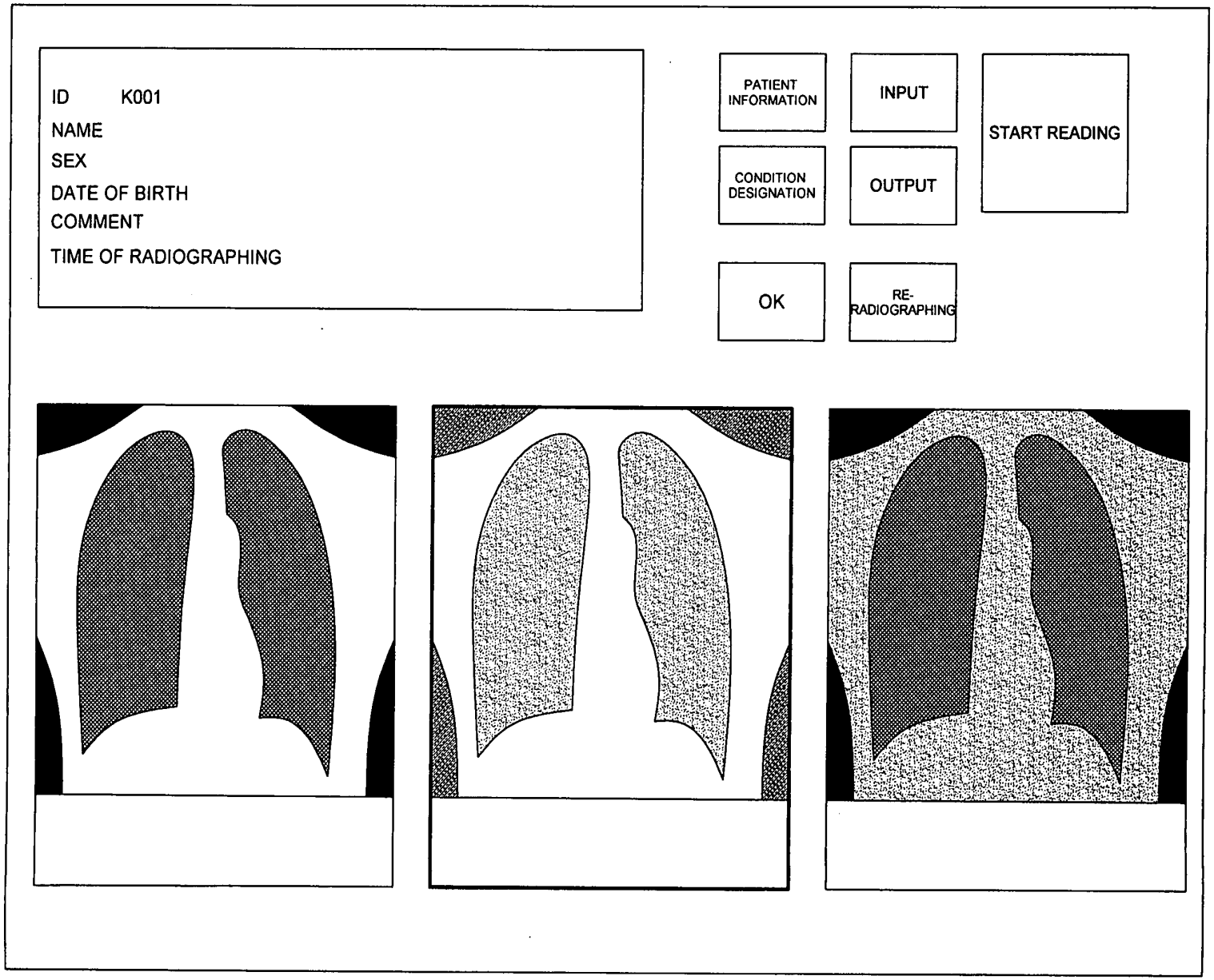


FIG. 15


ID K001
NAME
SEX
DATE OF BIRTH
COMMENT
TIME OF RADIOGRAPHING
PATIENT INFORMATION
INPUT
START READING
CONDITION DESIGNATION
OUTPUT
OK
RE-RADIOGRAPHING